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REMARKS

By this amendment, claim 10 has been canceled (claims 3 and 4 were previously canceled). Claims 1, 6 and 7 have been amended. Claims 1, 2 and 5-9 remain in the application. Support for the amendments to the claim can be found the specification and drawings. No new matter has been added. This application has been carefully considered in connection with the Examiner's Action. Reconsideration, and allowance of the application, as amended, is respectfully requested.

Objection to the Specification

The specification stands objected, wherein the title of the invention is not descriptive. Applicant notes the objection to the disclosure. As provided herein above, the title has been amended and now reads "HIGH-PRESSURE GAS-DISCHARGE LAMP WITH IMPROVED TEMPERATURE RESISTANCE." Accordingly, the objection is now believed overcome and should be withdrawn.

Objection to the Claims

Claims 7 and 10 stand objected to because of informalities. By this amendment, claim 10 has been canceled, thus rendering the rejection thereof now moot. With respect to claim 7, the same has amended with appropriate changes to remove the informalities previously contained therein. Support for the amendment to claim 7 can be found in the specification at least on page 7, line 7. Accordingly, the objection is now believed overcome and should be withdrawn.

Rejection under 35 U.S.C. §103

Claim 1 recites a high-pressure gas-discharge lamp, having at least one gastight fused press-seal between a glasslike material and molybdenum, wherein the molybdenum in the fused press-seal is at least partly exposed to an oxidizing environment and at least that part of the molybdenum that is

exposed to the oxidizing environment is covered with a coating, characterized in that the coating comprises at least one oxide from among Fe₂O₃, Ta₂O₅, Nb₂O₅, Al₂O₃, SiO₂, TiO₂, ZrO₂, HfO₂, and at least one of a nitride or a carbide wherein the nitride is selected from TiN, ZrN, HfN, AlN, BN, and wherein the carbide is selected from TiC, ZrC, HfC, VC, NbC, TaC, B₄C, and further characterized in that the coating is built up from at least two layers, wherein (i) the layer of the coating that is applied directly to the molybdenum is an intermediate layer composed of a mixture of nitrides and carbides with a quantitative ratio of nitrides to carbides which results in a coefficient of thermal expansion (CTE) of the intermediate layer having a value that is between that of molybdenum and that of the following layer and (ii) the following layer is composed of an oxide or a plurality of oxides.

Support for the amendments to claim 1 can be found in the specification at least on page 5, lines 5-8; and on page 7, lines 24-26.

Claims 1, 2, 8 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0052608 to Morimoto et al., and further in view of U.S. Patent 6,777,875 to Steinman et al. With respect to claim 1, Applicant traverses this rejection on the grounds that these references are defective in establishing a prima facie case of obviousness.

As the PTO recognizes in MPEP § 2142:

... The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness...

It is submitted that, in the present case, the examiner has not factually supported a prima facie case of obviousness for the following, mutually exclusive, reasons.

1. The References Do Not Teach the Claimed Subject Matter

The **Morimoto** and **Steinman** references cannot be applied to reject claim 1 under 35 U.S.C. § 103 which provides that:

A patent may not be obtained ... if the differences between the subject matter sought to be patented and the prior art are such that the <u>subject matter as a whole</u> would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains ... (Emphasis added)

Thus, when evaluating a claim for determining obviousness, <u>all limitations of the claim must be evaluated</u>. However, since neither **Morimoto** or **Steinman** teach a "... coating that is applied directly to the molybdenum is an *intermediate layer* composed of a *mixture* of *nitrides* <u>and</u> <u>carbides</u> with a <u>quantitative ratio</u> of nitrides to carbides which results in a coefficient of thermal expansion (CTE) of the intermediate layer having a value that is <u>between</u> that of molybdenum and that of the following layer " as is claimed in claim 1, it is impossible to render the subject matter of claim 1 as a whole obvious, and the explicit terms of the statute cannot be met.

Thus, for this mutually exclusive reason, the examiner's burden of factually supporting a *prima facie* case of obviousness has clearly not been met, and the rejection under 35 U.S.C. §103 should be withdrawn.

2. The Combination is Improper

Assuming, arguendo, that none of the above arguments for non-obviousness apply (which is clearly not the case based on the above), there is still another, mutually

exclusive, and compelling reason why the **Morimoto** and **Steinman** references cannot be applied to reject claim 1 under 35 U.S.C. § 103.

§ 2142 of the MPEP also provides:

...the examiner must step backward in time and into the shoes worn by the hypothetical 'person of ordinary skill in the art' when the invention was unknown and just before it was made.....The examiner must put aside knowledge of the applicant's disclosure, refrain from using hindsight, and consider the subject matter claimed 'as a whole'.

Here, neither **Morimoto** nor **Steinman** teaches, or even suggests, the desirability of the combination since neither teaches the specific combination of a "coating that is applied directly to the molybdenum is an *intermediate layer* composed of a *mixture* of nitrides <u>and</u> *carbides* with a *quantitative ratio* of nitrides to carbides which results in a *coefficient of thermal expansion* (CTE) of the intermediate layer having a value that is *between* that of molybdenum and that of the following layer" as specified above and as claimed in claim 1.

Thus, it is clear that the reference neither provides any incentive or motivation supporting the desirability of the combination. Therefore, there is simply no basis in the art for combining to support a 35 U.S.C. § 103 rejection.

In this context, the MPEP further provides at § 2143.01:

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.

In the above context, the courts have repeatedly held that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination.

In the present case it is clear that the examiner's combination arises solely from hindsight based on the invention without any showing, suggestion, incentive or motivation in the reference for the combination as applied to claim 1. Therefore, for this mutually exclusive reason, the examiner's burden of factually supporting a *prima facie*

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case of obviousness has clearly not been met, and the rejection under 35 U.S.C. §103 should be withdrawn.

Accordingly, claim 1 is allowable and an early formal notice thereof is requested. Dependent claims 2, 8 and 9 depend from and further limit independent claim 1 and therefore are allowable as well. Accordingly, the 35 U.S.C. § 103(a) rejection thereof has now been overcome and should be withdrawn.

Claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0052608 to Morimoto et al., U.S. Patent 6,777,875 to Steinman et al. and further in view of JP 2002260581 to Kamimura et al. This rejection is traversed for at least the following reason. Dependent claims 5 and 6 depend from and further limit allowable independent claim 1 and therefore are allowable as well. Accordingly, the rejection has now been overcome and should be withdrawn.

Claims 7 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0052608 to Morimoto et al. in view of U.S. Patent 6,777,875 to Steinman et al. and further in view of JP 2001102008 (as best understood). By this amendment, claim 10 has been canceled, thus rendering the rejection thereof now moot. With respect to claim 7, this rejection is traversed for at least the following reason. Dependent claim 7 depends from and further limits allowable independent claim 1 and therefore is allowable as well. Accordingly, the rejection has now been overcome and should be withdrawn.

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Conclusion

Except as indicated herein, the claims were not amended in order to address issues of patentability and Applicants respectfully reserve all rights they may have under the Doctrine of Equivalents. Applicants furthermore reserve their right to reintroduce subject matter deleted herein at a later time during the prosecution of this application or a continuation application.

It is clear from all of the foregoing that independent claim 1 is in condition for allowance. Dependent claims 2 and 5-9 depend from and further limit allowable independent claim 1 and therefore are allowable as well.

The amendments herein are fully supported by the original specification and drawings; therefore, no new matter is introduced.

Withdrawal of the final action and issuance of an early formal notice of allowance of claims 1, 2 and 5-9 is respectfully requested.

Respectfully submitted,

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